

DDDDDDDDDDDDDD		CCCCCCCCCCCC	LLL
DDDDDDDDDDDDDD		CCCCCCCCCCCC	LLL
DDDDDDDDDDDDDD		CCCCCCCCCCCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDDDDDDDDDDDDD		CCCCCCCCCCCC	LLLLLLLLLLLLLLLL
DDDDDDDDDDDDDD		CCCCCCCCCCCC	LLLLLLLLLLLLLLLL
DDDDDDDDDDDDDD		CCCCCCCCCCCC	LLLLLLLLLLLLLLLL


```

FFFFFFFFFF
FFFFFFFFFF
FF
FF
FF
FF
FFFFFFF
FFFFFFF
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FF
FF
FF
FF

```

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[illegible]

(3)	50	IF COMMAND
-----	----	------------

IF
V04-000

- IF COMMAND EXECUTION

C 11

15-SEP-1984 23:52:25 VAX/VMS Macro V04-00 Page 1
4-SEP-1984 23:40:57 DISK\$VMSMASTER:[DCL.SRC]IF.MAR;1 (1)

```
0000 1 .TITLE IF - IF COMMAND EXECUTION
0000 2 .IDENT 'V04-000'
0000 3
0000 4 *****
0000 5 *
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0000 22 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL. *
0000 23 *
0000 24 *
0000 25 *****
0000 26
0000 27 IF COMMAND EXECUTION
0000 28
0000 29 D. N. CUTLER 9-MAY-77
0000 30
0000 31 MODIFIED BY:
0000 32
0000 33 V03-002 PCG0003 Peter George 27-May-1983
0000 34 Add NOTHEN status.
0000 35
0000 36 V03-001 PCG0002 Peter George 24-Feb-1983
0000 37 Remove SETBIT WRK_V_NOSTAT.
0000 38 ---
```


IF
V04-000

- IF COMMAND EXECUTION

D 11

15-SEP-1984 23:52:25 VAX/VMS Macro V04-00 Page 2
4-SEP-1984 23:40:57 DISK\$VMSMASTER:[DCL.SRC]IF.MAR;1 (2)

```
0000 40 :  
0000 41 : MACRO LIBRARY CALLS  
0000 42 :  
0000 43 :  
0000 44 PRCDEF ;DEFINE PROCESS WORK AREA  
0000 45 WRKDEF ;DEFINE COMMAND WORK AREA  
0000 46  
0000 47 $CLIMSGDEF ;DEFINE ERROR/STATUS CODES  
00000000 48 .PSECT DCL$ZCODE, BYTE, RD, NOWRT
```



```
0000 50 .SBTTL IF COMMAND
0000 51 :+
0000 52 : DCL$IF - IF COMMAND
0000 53 :
0000 54 THIS ROUTINE IS CALLED AS AN INTERNAL COMMAND TO EXECUTE THE IF DCLS COMMAND.
0000 55 :
0000 56 INPUTS:
0000 57 :
0000 58 R10 = BASE ADDRESS OF COMMAND WORK AREA.
0000 59 R11 = BASE ADDRESS OF PROCESS WORK AREA.
0000 60 :
0000 61 OUTPUTS:
0000 62 :
0000 63 THE IF CLAUSE IS EVALUATED AND IF THE RESULTANT VALUE IS TRUE, THE
0000 64 THEN CLAUSE IS EXECUTED BY RETURNING CONTROL TO THE COMMAND EXECUTION
0000 65 ENTRY POINT. OTHERWISE CONTROL IS RETURNED VIA THE RETURN ADDRESS.
0000 66 :
0000 67 RO LOW BIT CLEAR INDICATES EXPRESSION EVALUATION FAILURE.
0000 68 :
0000 69 RO = DCL$_COMPLX - EXPRESSION TOO COMPLEX.
0000 70 RO = DCL$_EXPSYN - EXPRESSION SYNTAX ERROR.
0000 71 RO = DCL$_IVCHAR - INVALID CHARACTER IN NUMERIC STRING.
0000 72 RO = DCL$_IVOPER - INVALID EXPRESSION OPERATOR.
0000 73 RO = DCL$_UNDSYM - UNDEFINED SYMBOL.
0000 74 :
0000 75 RO = DCL$_NOTHEN - THEN KEYWORD NOT IN EXPECTED LOCATION
0000 76 :
0000 77 RO LOW BIT SET INDICATES SUCCESSFUL COMPLETION.
0000 78 :
0000 79 RO = DCL$_NORMAL - NORMAL COMPLETION.
0000 80 :-
0000 81 :
0000 82 DCL$IF::
0000 83 BSBW DCL$BINEXPR ;IF COMMAND
0000 84 BLBC RO,20$ ;EVALUATE ARITHMETIC EXPRESSION
0000 85 SUBL3 #4,WRK L EXPANDPTR(R10),R2 ;IF LBC EXPRESSION EVALUATION ERROR
0000 86 CMPL #^A/THEN7,(R2) ;GET POINTER TO "THEN" STRING
0000 87 BNEQ 30$ ;"THEN" KEYWORD?
0000 88 BLBC R1,10$ ;NO, THEN ERROR
0000 89 : ;IF LBC FALSE RESULT
0000 90 :
0000 91 : EXECUTE THEN CLAUSE OF IF COMMAND
0000 92 :
0000 93 :
0000 94 BRW DCL$CMDSTART
0000 95 :
0000 96 :
0000 97 : BYPASS THEN CLAUSE OF IF COMMAND
0000 98 :
0000 99 :
0000 100 10$: STATUS NORMAL
0000 101 20$: RSB
0000 102 :
0000 103 :
0000 104 : COMMAND SYNTAX ERROR
0000 105 :
0000 106 :
```

FFFD' 30 0000 83
1C 50 E9 0003 84
52 F486 CA 04 C3 0006 85
62 4E454854 8F D1 000C 86
OE 12 0013 87
03 51 E9 0015 88
0018 89
0018 90
0018 91
0018 92
0018 93
FFE5' 31 0018 94
001B 95
001B 96
001B 97
001B 98
001B 99
001B 100
05 0022 101
0023 102
0023 103
0023 104
0023 105
0023 106

IF
V04-000

- IF COMMAND EXECUTION
IF COMMAND

F 11

15-SEP-1984 23:52:25 VAX/VMS Macro V04-00 Page 4
4-SEP-1984 23:40:57 DISK\$VMSMASTER:[DCL.SRC]IF.MAR;1 (3)

50	00038210	FFDA'	30	0023	107	30\$:	BSBW	DCL\$MARK
		8F	D0	0026	108		MOVL	#CLIS_NOTHEN,R0
			05	002D	109		RSB	
				002E	110			
				002E	111		.END	

IF
Symbol table

- IF COMMAND EXECUTION

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4-SEP-1984 23:40:57 DISK\$VMSMASTER:[DCL.SRC]IF.MAR;1 (3)

CLIS_NORMAL	= 00030001		
CLIS_NOTHEN	= 00038210		
DCL\$BINEXPR	*****	X	02
DCL\$CMDSTART	*****	X	02
DCL\$IF	00000000	RG	02
DCL\$MARK	*****	X	02
PRC_B_CONTINUE	000000F3		
PRC_B_DEFRADIX	000000AE		
PRC_B_EXMDEPMOD	000000AD		
PRC_B_EXMDEPWID	000000AC		
PRC_B_EXONLYL	0000012D		
PRC_B_FLAGS2	000000AF		
PRC_B_IMGFLAG	00000078		
PRC_B_OUTFLAGS	0000012C		
PRC_B_PROMPTLEN	000000F0		
PRC_C_LENGTH	00000534		
PRC_G_COMMANDS	00000133		
PRC_G_PROMPT	000000F4		
PRC_K_LENGTH	00000534		
PRC_L_CURRKEY	00000048		
PRC_L_EXMDEPADR	000000A8		
PRC_L_EXTARG	00000094		
PRC_L_EXTBLK	0000008C		
PRC_L_EXTCOD	0000009C		
PRC_L_EXTHND	00000090		
PRC_L_EXTPRM	00000098		
PRC_L_IDFLNK	000000BC		
PRC_L_IMGACTSTS	00000080		
PRC_L_INDCLOCK	0000007C		
PRC_L_INDEPTH	0000005C		
PRC_L_INDFAB	0000001C		
PRC_L_INDIRPRAB	00000014		
PRC_L_INDOUTRAB	00000018		
PRC_L_INPRAB	00000008		
PRC_L_LASTKEY	0000004C		
PRC_L_LSTSTATUS	000000B0		
PRC_L_ONCTLY	000000B8		
PRC_L_ONERROR	0000006C		
PRC_L_OUTOFBAND	000000B4		
PRC_L_OUTRAB	0000000C		
PRC_L_OUTRABCTX	00000118		
PRC_L_PPFLIST	00000070		
PRC_L_RECALLPTR	0000012F		
PRC_L_RESTART	00000058		
PRC_L_SAVAP	00000000		
PRC_L_SAVFP	00000004		
PRC_L_SEVERITY	00000050		
PRC_L_SPWN	000000C0		
PRC_L_STACKLM	000000A4		
PRC_L_STACKPT	000000A0		
PRC_L_STATUS	00000054		
PRC_L_STS	00000084		
PRC_L_STV	00000088		
PRC_L_SYMBOL	00000060		
PRC_L_TMBX	00000074		
PRC_L_TRMLIST	00000010		
PRC_Q_ALLOCREG	00000020		

PRC_Q_COMMAND	000000E0
PRC_Q_FLUSHTIME	000000D0
PRC_Q_GLOBAL	00000028
PRC_Q_IMAGENAME	000000D8
PRC_Q_KEYPAD	00000040
PRC_Q_LABEL	00000030
PRC_Q_LOCAL	00000038
PRC_Q_SAVEPRIV	000000E8
PRC_T_OUTDVI	0000011C
PRC_W_ASTIOSB	000000C6
PRC_W_ASTRETN	000000C8
PRC_W_ASTSTATUS	000000C4
PRC_W_ATTMBX	0000007A
PRC_W_FLAGS	00000068
PRC_W_INPCHAN	00000064
PRC_W_ONLEVEL	0000006A
PRC_W_OUTIFI	00000114
PRC_W_OUTISI	00000116
PRC_W_OUTMBXCHN	000000CA
PRC_W_OUTMBXREF	000000CE
PRC_W_OUTMBXSIZ	000000CC
PRC_W_PMPTCTRL	000000F1
PRC_W_WAITIOSB	00000066
WRK_B_CMDOPT	FFFFFFFFC3
WRK_B_MAXPARM	FFFFFFFFD0
WRK_B_MINPARM	FFFFFFFFD1
WRK_B_PARMCNT	FFFFFFFFCE
WRK_B_PARMSUM	FFFFFFFFCF
WRK_B_RECALLCNT	FFFFFFFFC5
WRK_B_VALLEV	FFFFFFFFC4
WRK_B_VERBTYP	FFFFFFFFC2
WRK_C_LENGTH	FFFFFF486
WRK_G_BUFFER	FFFFFF492
WRK_G_INPBUF	FFFFFF896
WRK_G_RESULT	FFFFFF9B6
WRK_K_LENGTH	FFFFFF486
WRK_L_CHARPTR	FFFFFF48E
WRK_L_DISALLOW	FFFFFFFE6
WRK_L_ERRORRTN	FFFFFF9AE
WRK_L_EXPANDPTR	FFFFFF486
WRK_L_IMAGE	FFFFFFFE2
WRK_L_MARKPTR	FFFFFF48A
WRK_L_PAROUT	FFFFFFFD2
WRK_L_PMPTADDR	FFFFFF9A2
WRK_L_PROMPTRTN	FFFFFF9A6
WRK_L_PROPTR	FFFFFFFC6
WRK_L_QUABLK	FFFFFFFCA
WRK_L_READRTN	FFFFFF9AA
WRK_L_RECALLPTR	FFFFFFFEA
WRK_L_RSLND	FFFFFFFB6
WRK_L_RSLNXT	FFFFFFFBA
WRK_L_SAVAP	FFFFFFF8
WRK_L_SAVFP	FFFFFFFC
WRK_L_SAVSP	FFFFFFF4
WRK_L_SIGNALRTN	FFFFFFFD6
WRK_L_SPECRTN	FFFFFF9B2
WRK_L_TAB_VEC	FFFFFFFDE

IF
Symbol table

- IF COMMAND EXECUTION

H 11

15-SEP-1984 23:52:25 VAX/VMS Macro V04-00 Page 6
4-SEP-1984 23:40:57 DISK\$VMSMASTER:[DCL.SRC]IF.MAR;1 (3)

WRK_L_VERB	FFFFFFBE
WRK_W_FLAGS	FFFFFFF0
WRK_W_FLAGS2	FFFFFFF2
WRK_W_IMGCHAN	FFFFFFEE
WRK_W_PMPTLEN	FFFFFF9E

+-----+
! Psect synopsis !
+-----+

PSECT name	Allocation	PSECT No.	Attributes
. ABS .	00000000 (0.)	00 (0.)	NOPIC USR CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE
\$ABSS	FFFFFFFC (0.)	01 (1.)	NOPIC USR CON ABS LCL NOSHR EXE RD WRT NOVEC BYTE
DCL\$ZCODE	0000002E (46.)	02 (2.)	NOPIC USR CON REL LCL NOSHR EXE RD NOWRT NOVEC BYTE

+-----+
! Performance indicators !
+-----+

Phase	Page faults	CPU Time	Elapsed Time
Initialization	15	00:00:00.05	00:00:01.00
Command processing	102	00:00:00.72	00:00:07.21
Pass 1	170	00:00:04.89	00:00:18.76
Symbol table sort	0	00:00:00.50	00:00:01.46
Pass 2	26	00:00:00.67	00:00:02.97
Symbol table output	11	00:00:00.10	00:00:00.35
Psect synopsis output	2	00:00:00.02	00:00:00.02
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	326	00:00:06.95	00:00:31.77

The working set limit was 1050 pages.
20448 bytes (40 pages) of virtual memory were used to buffer the intermediate code.
There were 30 pages of symbol table space allocated to hold 394 non-local and 3 local symbols.
111 source lines were read in Pass 1, producing 13 object records in Pass 2.
26 pages of virtual memory were used to define 13 macros.

+-----+
! Macro library statistics !
+-----+

Macro library name	Macros defined
_\$255\$DUA28:[SYSLIB]SYSBLDMLB.MLB;1	0
_\$255\$DUA28:[DCL.OBJ]DCL.MLB;1	5
_\$255\$DUA28:[SYS.OBJ]LIB.MLB;1	0
_\$255\$DUA28:[SYSLIB]STARLET.MLB;2	3
TOTALS (all libraries)	8

497 GETS were required to define 8 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$:IF/OBJ=OBJ\$:IF MSRC\$:IF/UPDATE=(ENH\$:IF)+EXECML\$/LIB+LIB\$:DCL/LIB+SYSS\$LIBRARY:SYSBLDMLB/LIB

0070

AH-BT13A-SE
VAX/VMS V4.0

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